

The Indigoferas of China.

BY

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SOME time ago the writer, at Professor Balfour's request, undertook the revision of the Chinese Leguminosae—with the exception of a few genera which were being, or had already been, revised by botanists making a special study of those genera—preserved in the herbarium attached to the Royal Botanic Garden, Edinburgh. Shortly afterwards, Professor C. S. Sargent offered to place at the writer's disposal most of the Leguminosae collected by Mr. E. H. Wilson during his expeditions to China under the auspices of the Arnold Arboretum. Advantage was taken of the bringing of these large collections to Kew to compare them with the copious material in that herbarium, and to revise the genera where necessary.

The first genus to be examined was *Indigofera*, and here so much unnamed material had accumulated that it was deemed advisable to go rather fully into the genus, and the results of the examination are given below in a preliminary enumeration, accompanied by an artificial key to the species enumerated. In the enumeration there are incorporated, besides the material mentioned above, the specimens preserved in the Natural History Museum, S. Kensington, permission to examine which was kindly granted by the keeper, Dr. Rendle.

In conclusion, the writer begs to acknowledge his indebtedness to Professor Sargent for allowing the descriptions of the new species collected by Wilson to be incorporated in the present paper instead of (as was originally intended) in the next part of the *Plantae Wilsonianae*. By this arrangement the great advantage is secured of having all the descriptions in one place.

I. DESCRIPTION OF NEW SPECIES.

Indigofera amblyantha, Craib. Sp. nov., ab *I. Pseudotinctoria*, Matsum., foliis majoribus petiolis duplo saltem longioribus suffultis distinguenda.

[Notes, R.B.G., Edin., No. XXXVI, March 1913.]

Ramuli primo pilis albis adpressis densius tecti, angulati, straminei, demum fere glabri, teretes, cortice brunneo vel pallide brunneo obtecti. *Folia* 7-9—foliolata, 9-10 cm. longa, petiolo 3-4 cm. longo ut rachi supra late canaliculato suffulta; stipulae 1.5 mm. longae; foliola opposita vel raro alterna, oblongo-elliptica, elliptica vel oblongo-obovata, apice rotundata, mucronata, basi cuneata vel late cuneata, 15-31 mm. longa, 8-17 mm. lata, pagina utraque pilis albis medifixis breviusculis parce instructa, subtus pallidiora, nervis lateralibus utrinque circiter 6 supra subconspicuis; petioluli circiter 1.5 mm. longi; stipellae minutae. *Racemi* axillares, ad 11 cm. longi, fere e basi floriferi; bractae paulo ultra 1 mm. longae, deciduae; pedicelli 1.5 mm. longi. *Calycis* tubus 1.5 mm. longus, lobo infimo subaequilongus; lobi laterales infimo breviores, supremi breves. *Vexillum* circiter 6 mm. longum, apice cochleatum; alae 6.5 mm. longae; carina alis paulo brevior.

W. Hupeh, Wilson, 3077 (Herb. Kew!).

Indigofera Balfouriana, Craib. Sp. nov., ab affini *I. Dielsiana*, Craib, calyce ejusque tubo corollae brevioribus recedit.

Frutex 0.6-1.8 m. altus (ex Forrest); ramuli primo subadpresse crispatis pubescentes, mox glabri, cortice brunneo lenticellato obtecti. *Folia* 5-7—foliolata, 12-30 mm. longa, petiolo 5-13 mm. longo suffulta; stipulae circiter 3 mm. longae, adpresse brunneo-pubescentes; foliola elliptica vel terminalia obovata, apice rotundata vel saepius retusa, mucronata, basi late cuneata vel rotundata, 6-13 mm. longa, 4-9.5 mm. lata, pagina utraque sed subtus densius adpresse albo-pubescentia, subtus pallidiora, nervis subobscuris; petioluli ad 1.5 mm. longi; stipellae parvae. *Racemi* axillares, ad 2.5 cm. longi, pedunculo communi brevi suffulti; pedicelli ad 2 mm. longi; bractae paulo ultra 1 mm. longae, cito deciduae. *Calycis* tubus 1 mm. longus; lobus infimus lineari-lanceolatus, acutus, 1.25 mm. longus; lobi supremi deltoidei, acutiusculi, 1 mm. longi. *Vexillum* suborbiculare, emarginulatum, subsessile, 8 mm. longum, 7 mm. latum; alae 7.25 mm. longae, 2.5 mm. latae; carina 7 mm. longa, 2.75 mm. lata.

"Eastern flank of the Lichiang Range. Lat. 27° 10' N. Shrub of 2-6 ft. Flowers deep rose. Dry, open situations amongst scrub. 9000-10,000 ft." Forrest, 5627 (Herb. Edinburgh!).

Indigofera Carlesii, Craib. Sp. nov., ab *I. Kirilowii*, Maxim. ex Palibin, corolla ante anthesin omnino dense breviter albo-tomentella, foliolis majoribus distinguenda.

Ramuli pilis adpressis medifixis instructi, plus minusve glabrescentes, primo angulati, mox teretes vel fere teretes. *Folia* 5-9—foliolata, 7.5-11.5 cm. longa, petiolo 1.7-2.2 cm. longo ut rachi supra canaliculato pilis medifixis adpressis hispido plus minusve glabrescente suffulta; stipulae deciduae, 1 cm. longitudine vix attingentes; foliola opposita, subelliptica vel ovato-elliptica, paulo inaequilatera, apice obtusa vel rotundata, apiculata, basi cuneata vel rotundato-cuneata, 2-5 cm. longa, 1.4-3 cm. lata, rigide chartacea, pagina utraque pilis breviusculis medifixis hispida, nervis lateralibus utrinque 6-8 supra conspicuis subtus prominentibus, nervis transversis supra conspicuis vel subconspicuis subtus prominulis; petioluli 2-4 mm. longi; stipellae conspicuae petiolulis plerumque paululo longiores. *Racemi* axillares, sub anthesin laxiusculi, folia valde superantes, ad 17 cm. longi, pedunculo communi ad 6 cm. longo ut rachi angulato pilis adpressis breviusculis medifixis laxius instructo suffulti; pedicelli 4 cm. vix attingentes, post anthesin incrassati; bractee deciduae, circiter 2 mm. longae. *Calycis* tubus 2.5 mm. longus, lobo infimo subaequilongus. *Vexillum* subellipticum, 15.5 mm. longum, 9 mm. latum, apice rotundatum; alae carinae subaequales.

Chinkiang, Carles, 514 (Herb. Kew! Edinburgh!).

Indigofera chalara, Craib. Sp. nov., ab *I. Kirilowii*, Maxim. ex Palib., foliolis alternis, calycis lobis brevioribus latioribus distinguenda.

Suffrutex 1.8 m. altus (ex Wilson); ramuli pilis perpaucis medifixis adpressis primo instructi, mox glabri, brunneo- vel cinereo-brunneo-corticati. *Folia* 7-9—foliolata, 9.5-11 cm. longa, petiolo 1.5-2.2 cm. longo supra canaliculato ut rachi parce adpresse pubescente suffulta; stipulae cito deciduae; foliola alterna, plerumque ovata, ovato-lanceolata vel late ovata, interdum subrotundata vel terminalia obovata, apice acuta, obtusa, rotundata vel retusa, apiculata, basi plerumque parum obliqua, late cuneata, rotundata vel truncata, 1.7-3 cm. longa, 1.1-2.4 cm. lata, chartacea, pagina utraque pilis medifixis crispulis instructa, nervis lateralibus utrinque circiter 6 obscuris vel pagina superiore subconspicuis, petiolulis 1.5-3 mm. longis suffulta; stipellae filiformes, circiter 1.5 mm. longae. *Racemi* axillares, ad 10 cm. longi, pedunculo communi petiolo subaequilongo vel eo longiore suffulti; pedicelli graciles, circiter 4 mm. longi; bractee deciduae. *Calycis* tubus ad 2 mm. longus, lobus infimus 1 mm. longus. *Vexillum* 12 mm. longum, 5.5 mm. latum; alae 10.5 mm. longae; carina 12 mm. longa.

Central China, Wilson, 1230 (Herb. Kew, coll. May 1901! Herb. Edinburgh, coll. June 1900!).

Indigofera Cooperii, Craib. Sp. nov., ob foliola mediocria numerosa, racemos elongatos floresque ad 1.5 cm. longos distincta.

Caules (vel ramuli?) glabri, ad 15 cm. longi. *Folia* 13–17—foliolata, 8.5–10.3 cm. longa, petiolo 1.8–2 cm. longo ut rachi supra canaliculato glabro suffulta; stipulae fugaces; foliola opposita vel plerumque alterna, inaequilatera, ovato-lanceolata, oblanceolata vel elliptico-oblanceolata, infima interdum fere rotundata, apice obtusa vel rotundata, apiculata, basi cuneata vel rotundata, 7–19 mm. longa, 5–10 mm. lata, chartacea vel membranaceo-chartacea, pagina utraque pilis albidis medifixis adpressis parce instructa, nervis lateralibus utrinque circiter 6 supra obscuris subtus obscuris vel subconspicuis; petioluli circiter 1.5 mm. longi; stipellae graciles, petiolulis subaequales. *Racemi* axillares, 9–12 cm. longi, pedunculo communi 3.4–3.7 cm. longo ut rachi glabro suffulti; bractae deciduae; pedicelli 2.5–3 mm. longi. *Calyx* 2.5 mm. longus, lobis deltoideis tubo brevioribus. *Vexillum* 14.5 mm. longum, 8 mm. latum; carina 15 mm. longa, alas paulo superans.

Ningpo, Cooper (Herb. Kew!).

Indigofera dichroa, Craib. Sp. nov., ab *I. Kirilowii*, Maxim. ex Palibin, foliolis 5 tantum densius pubescentibus recedit.

Ramuli primo pilis medifixis adpressis albis densius tecti, mox glabri, cortice viridi-stramineo obtecti, subangulati. *Folia* 5—foliolata, ad 4 cm. longa, petiolo 1.2–2 cm. longo ut rachi supra canaliculato adpresse pubescente suffulta; stipulae subulatae, 4 mm. longae; foliola opposita vel interdum inferiora alterna, elliptica, ovato-elliptica vel elliptico-obovata, basi cuneata vel rotundata, apice attenuata vel rotundata, apiculata, 10–20 mm. longa, 8–10 mm. lata, chartacea, pagina superiore pilis brevibus densius instructa, inferiore dense longiuscule adpresse pubescentia, nervis lateralibus utrinque ad 6 pagina utraque subconspicuis; petioluli ad 1.75 mm. longi; stipellae minutae. *Racemi* axillares, ad 5 cm. longi, pedunculo communi 5–9 mm. longo ut rachi densius albo-pubescente suffulti; pedicelli ad 2 mm. longi, pilis albis adpressis obtecti; bractae deciduae. *Calycis* tubus 2 mm. longus, lobus infimus 1.5 mm. longus, 1 mm. latus. *Vexillum* elliptico-obovatum, 11.5 mm. longum, 9 mm. latum; alae vexillo aequilongae, 3 mm. latae; carina 12 mm. longa, 3.5 mm. lata, obtusa.

West Szechuan, Wilson, 3084, coll. June 1908 (Herb. Kew!).

Indigofera Dielsiana, Craib. Sp. nov., ab *I. argutidente*, Craib, calycis lobis corollaque brevioribus facile distinguenda.

Frutex 0.9–1.8 m. altus (ex Forrest); ramuli primo pilis albidis subadpressis hic illic instructi, mox glabri, cortice fusco-

brunneo obtecti, angulati. *Folia* 5-9—foliolata, 2-4 cm. longa, petiolo 1-2.3 cm. longo ut ramulis rachique pauperrime pubescente suffulta; stipulae ad 6 mm. longae, breviter adpresse brunneo-pubescentes; foliola opposita, elliptica vel oblongo-elliptica, utrinque rotundata vel basi rotundato-cuneata cuneatae, apice mucronata, 8-20 mm. longa, 5-10.5 mm. lata, chartacea, pagina utraque sparse adpresse pubescentia, nervis lateralibus paucis subconspicuis; petioluli circiter 1.5 mm. longi, tenuiter pubescentes; stipellae graciles, petiolulis breviores. *Racemi* axillares, ad 5 cm. longi, pedunculo communi 5-10 mm. longo ut rachi adpresse pubescente suffulti; pedicelli graciles, 2-3 mm. longi; bractaeae plerumque deciduae, vix 3 mm. longae. *Calycis* tubus 2 mm. longus, lobus infimus lanceolatus, acutus, 1.5 mm. longus. *Vexillum* ellipticum, in unguem brevem contractum, 9.5 mm. longum, 6.5 mm. latum; alae vix 9 mm. longae, 2.75 mm. latae; carina 8.5 mm. longa, 2.5 mm. lata.—*I. pendula*, Franchet, var., Diels in Notes, Edin. Bot. Gard., No. xxxiii. pp. 219, 220.

"Along the base of the eastern flank of the Tali Range. Lat. 25° 40' N. Shrub of 3-6 ft. Flowers pale rose. Dry, open situations amongst scrub. 7000-8000 ft." Forrest, 4251. (Herb. Edinburgh!).

A shade form of this species is represented by Forrest, 4258, from the same locality at 8000-9000 ft. (Herb. Edinburgh!).

Ducloux, 817 (Herb. Kew!), is rather scrappy, but may be merely a form of this species with keel nearly 10 mm. long.

Indigofera Duclouxii, Craib. Sp. nov., ob flores 16-17 mm. longos cum foliis coetaneos distincta.

Ramuli juventute pilis longiusculis divergentibus brunneis parce instructi, mox glabri vel subglabri, cortice brunneo vel fusco-brunneo obtecti. *Folia* 15-19—foliolata, vix matura, ad 10 cm. longa, petiolo ad 32 mm. longo indumento racheos ramulorumque juvenilium suffulta; stipulae lineares, acutae, circiter 9 mm. longae, pilis brunneis albisque immixtis laxae tectae; foliola opposita, oblonga, basi cuneato-rotundata vel rotundata, apice rotundata vel truncata, mucronata, ad 24 mm. longa et 12 mm. lata, pagina utraque, saltem statu juvenili, tenuiter laxae pilosa, nervis lateralibus obscuris, petiolulis 1 mm. longis indumento ramulorum suffulta; stipellae filiformes, ad 4 mm. longae. *Racemi* cum foliis coetanei, ad 7 cm. longi, pedunculo ad 2 cm. longo indumento ut rachi ramulisque juvenilibus suffulti; pedicelli 3 mm. longi, brunneo-pilosi; bractaeae deciduae, circiter 3.5 mm. longae. *Calycis* tubus 1.5 mm. longus, lobi ad 3 mm. longi (sub anthesin). *Vexillum* oblongo-obovatum, 17 mm.

longum, 10 mm. latum; alae 16.5 mm. longae, 4.5 mm. latae; carina 16.5 mm. longa, 5 mm. lata.

Yunnanfu, Ducloux, 706 (Herb. Kew !).

Indigofera Faberii, Craib. Sp. nov., *I. decorae*, Lindl., affinis sed carinae acumine fere 2 mm. longo recedit.

Suffrutex ramulis pilis perpaucis albidis medifixis adpressis parvis instructis fusco-brunneo-corticatis. *Folia* 11—foliolata, petiolo 26—32 mm. longo ut rachi glabro suffulta; stipulae fugaces; foliola opposita vel subopposita, parum inaequilatera, plerumque ovata vel ovato-lanceolata, apice attenuata, mucronata, basi late cuneata, ad 25 mm. longa et 12 mm. lata, chartacea, supra glabra, subtus pilis breviusculis albidis medifixis sparse instructa, nervis lateralibus utrinque circiter 6 pagina utraque conspicuis, nervulis uti reticulatione gracili subtus tantum conspicuis; petioluli circiter 2.5 mm. longi; stipellae graciles, ad 4 mm. longae. *Racemi* in exemplo altero axillares, in altero in ramulo aphylo alternatim dispositi, ad 11 cm. longi, pedunculo 22—30 mm. longo suffulti; pedicelli ad 4 mm. longi, ut rachis glabri; bractae deciduae. *Calycis* tubus 1.5 mm. longus, lobus infimus 1 mm. longus. *Vexillum* 11.5 mm. longum, 5.5—7 mm. latum; alae 12 mm. longae, 1.75 mm. latae; carina acuminata, 13.5 mm. (acumine incluso) longa.

Chekiang Province: Tien Tai Mountains, about 300 m., Faber, 243 (Herb. Kew !).

Indigofera Forrestii, Craib. Sp. nov., *I. cinerascens*, Franchet, habitu similis sed indumento tenuiore, carina vix acuminata distinguenda.

Fruticulus 45—60 cm. altus (ex Forrest); caules primo adpresse breviter pubescentes, mox glabri vel fere glabri, angulati, pallide brunneo-corticati. *Folia* plerumque 11—13—foliolata, rarius 15, rarissime tantum 5—foliolata, ad 6 cm. longa, petiolo 8—12 mm. longo ut rachi supra sicco anguste canaliculato suffulta; stipulae circiter 1.5 mm. longae; foliola opposita, anguste elliptica vel terminalia fere cuneata, apice rotundata vel terminalia truncato-retusa, omnia breviter mucronata, basi rotundata vel cuneato-rotundata, 6—11 mm. longa, 4—6 mm. lata, firma, pagina utraque sed superiore crassius adpresse albo-pubescentia, costa supra sicco impressa subtus prominente, nervis lateralibus obscuris, petiolulis circiter 1 mm. longis suffulta; stipellae parvae. *Racemi* axillares, densi, ad 7 cm. longi, pedunculo communi plerumque petiolo distincte longiore rarius eo brevior suffulti; bractae circiter 1 mm. longae; pedicelli bracteis subaequilongi. *Calyx* 2 mm. vix excedens; lobi deltoidei, acuti,

supremi breves, infimo tubo subaequali. *Vexillum* ellipticum, sessile, apice breviter apiculatum, 6.5 mm. longum, fere 5 mm. latum; alae fere 6.5 mm. longae, 2 mm. latae; carina obtusa, 6.25 mm. longa, 2 mm. lata.

"Eastern flank of the Tali Range. Lat. 25° 40' N. Dwarf shrub of 1½–2 ft. Flowers deep purplish-rose, interior darkest. Stony pasture and on ledges of cliffs. Alt. 8000–9000 ft." Forrest, 7000 (Herb. Edinburgh!).

Indigofera Fortunei, Craib. Sp. nov., ab *I. venulosa*, Champion, foliolis glabris nisi juvenilibus pilis perpaucis cito deciduis margine inferne costaque infra instructis distinguenda.

Fruticulus circiter 30 cm. altus (ex Fortune), caule erecto glabro tenuiter angulato brunneo-corticato ad 3 mm. diametro. *Folia* 7–15—foliolata, 6–10 cm. longa, petiolo 2–3 cm. longo glabro suffulta; stipulae deciduae, 3.5 mm. longae; foliola plerumque opposita sed interdum alterna, ovato-lanceolata vel ovato-elliptica, inaequilatera, apice obtusa vel rotundata, apiculata, basi rotundata vel cuneato-rotundata, 15–22 mm. longa, 9–16 mm. lata, rigida, glabra nisi primo pilis perpaucis medifixis cito deciduis margine inferne costaque infra instructa, nervis lateralibus utrinque 6–8 cum nervulis supra conspicuis subtus prominulis, petiolulis 2 mm. longis suffulta; stipellae conspicuae, petiolulos subaequant. *Racemi* axillares, ad 13 cm. longi, pedunculo communi ad 3 cm. longo suffulti; pedicelli 3 mm. longi; bractaeae deciduae. *Calycis* tubus 2 mm. longus, lobus infimus circiter 1.5 mm. longus. *Vexillum* 10–11 mm. longum, 6–9.5 mm. latum, apice emarginulatum; alarum lamina 6.5 mm. longa, 2.5 mm. lata, ungui 3.5 mm. longo vix 1.5 mm. lato adjecto; carina 11.5 mm. longa, 4 mm. lata. *Ovarium* 5 mm. altum, glabrum.

China, Fortune, 43 ex Herb. Benth., sine numero ex Herb. Hook. (Herb. Kew!).

Indigofera Hancockii, Craib. Sp. nov., *I. cinerascens*, Franchet, habitu persimilis sed partibus junioribus pilis medifixis et albidis et brunneis haud albidis tantum vestitis, carina haud vel brevissime acuminata distinguenda.

Caules primo pilis medifixis albidis cum brunneis immixtis adpressis dense vestiti, mox glabri vel fere glabri, cortice rubro-brunneo obtecti. *Folia* 4–5 cm. longa, 9–17—foliolata, petiolo circiter 9 mm. longo suffulta, petiolo rachique ut caulibus pubescentibus supra canaliculatis vel obscure canaliculatis; stipulae parvae, cito deciduae; foliola opposita, plerumque oblongo-obovata vel terminalia obovata, apice rotundata vel retusa, mucronulata, basi cuneata, 0.7–1 cm. longa, 3.5–6 mm. lata, coriacea, costa pagina superiore immersa, inferiore prominente,

nervis lateralibus omnino obscuris, utrinque pilis albidis brunneisque rigidis adpressis medifixis scabrida, petiolulis 1-1.5 mm. longis suffulta; stipellae minutae. *Racemi* axillares, folia superantes, pedunculo communi petiolos subaequante suffulti, densiusculi; pedicelli 1-1.5 mm. longi; bractae inconspicuae, cito deciduae. *Calyx* 2 mm. longus; lobi deltoidei, acutiusculi, infimo tubo vix aequilongo. *Vexillum* oblongum, apice rotundatum, sessile, 7.25 mm. longum, 5 mm. latum; alae 6 mm. longae, 1.5 mm. latae; carina 7 mm. longa, 2.5 mm. lata, brevissime vel vix acuminata.

Yunnan: Mengtze, 1500-1950 m., Hancock, 332 (Herb. Kew!).

Indigofera Henryi, Craib. Sp. nov., ab affini *I. cinerascens*, Franchet, pedicellis sub anthesin 5 mm. longis facile distinguenda.

Suffruticulus circiter 30 cm. altus (ex Henry); ramuli pilis albis medifixis adpressis parce instructi, angulati, brunneo-vel pallide brunneo-corticati. *Folia* 17-21—foliolata, 4-8 cm. longa, petiolo 5-8 mm. longo supra planiusculo suffulta, racheos nodis ob internodios inferne contractos quasi-articulatis, internodiis ex infra visis subalatis superioribus supra distincte canaliculatis, rachi petioloque sparse adpresse albo-pubescentibus; stipulae 5 mm. longae; foliola parum inaequilatera, oblonga, apice plerumque rotundata, mucronata, basi late cuñeata, rotundata vel truncata, 11-23 mm. longa, 5-9 mm. lata, pagina utraque pilis albis medifixis instructa, pilis supra breviusculis subtus longioribus sparsioribus, nervis lateralibus utrinque 4-6 pagina utraque subconspicuis; petioluli circiter 1 mm. longi; stipellae graciles, petiolulos paulo superantes. *Racemi* axillares, folia subaequantes vel iis breviores, pedunculo communi petiolis paulo longiore adjecto; pedicelli sub anthesin 5 mm. longi, in fructu ad 9 mm. longi; bractae deciduae, circiter 2 mm. longae. *Calycis* tubus 1.5 mm. longus, lobi deltoidei, acuti, infimus 1.5 mm. longus, 1.25 mm. latus, ceteri paulo breviores. *Vexillum* obovatum, apice rotundatum, circiter 9 mm. longum et 6 mm. latum; alae 9.5 mm. longae, 2.75 mm. latae; carina obtusa, 8 mm. longa. *Ovarium* 4.5 mm. altum, glabrum.

Yunnan: Mengtze, on rocky mountains, 1950 m., Henry, 10050a (type—Herb. Kew! Edinburgh!), Henry, 10050b (Herb. Kew!).

Indigofera Henryi, Craib, var. **silvarum**, Craib, var. nov., ab *I. Henryi*, Craib, inflorescentia insigniter laxa, pedicellis longis distincta.

Ramulus (caulisve?) gracilis, parum flexuosus, primo leviter angulatus, mox teres, pallide brunneo-corticatus. *Folia* erecto-patentia, 17-19—foliolata, 9-10 cm. longa, rachi supra planiuscula

vel leviter canaliculata, infra convexa et subalata; petiolus 8-10 mm. longus; stipulae mox deciduae, conspicuae, divaricatae, filiformes, ad 4 mm. longae; foliola opposita, lateralialia plerumque oblonga, interdum, inferiora praecipue, ovato-elliptica, basi rotundata, inaequalia, apice rotundata vel subrotundata, terminalialia basi cuneata, apice rotundata vel truncata, omnia apiculo tenui circiter 1.25 mm. longo instructa, 10-21 mm. longa, 7-11 mm. lata, chartacea, pagina superiore pilis brevibus medifixis sparse instructa, inferiore pilis albidis rigidioribus longioribus hic illic instructa, costa subtus prominente, nervis lateralibus utrinque 4-5 haud semper subtus conspicuis; petioluli 1-1.25 mm. longi; stipellae parvae. *Racemi* axillares, foliis plerumque breviores vel iis interdum subaequales, laxi, pedunculo communi petiolo plerumque duplo longiore suffulti; bracteae post anthesin persistentes, 2 mm. longae; pedicelli graciles, 8-9 mm. longi. *Flores* iis *I. Henryi* subsimiles.

Yunnan: Mengtze, in wooded glens, 1500-1800 m., Hancock, 368 (Herb. Kew!).

Indigofera Hosiei, Craib. Sp. nov., ab affini *I. Bungeana*, Walp., floribus parum longioribus, calycis lobis multo longioribus facile distinguenda.

Ramuli primo pilis albidis medifixis adpressis dense vestiti, dein glabri, brunneo-corticati, ad 4-4.5 mm. diametro. *Folia* 7-foliolata, 3 cm. longitudine vix attingentia, petiolo ad 1 cm. longo adjecto, petiolo rachique supra plus minusve canaliculatis; stipulae parvae, ramulis adpressae, deciduae; foliola opposita, plerumque oblongo-elliptica vel oblonga, apice rotundata vel parum retusa, mucronulata, basi inaequalia, rotundata vel late cuneata, 7-8 mm. longa, 4.5-6 mm. lata, tenuiter chartacea, supra fusca, subtus viridia, costa subtus prominente, nervis lateralibus obscuris, pagina superiore pilis medifixis tenuioribus albidis parce instructa, inferiore pilis medifixis rigidioribus albidis hic illic ornata; petioluli circiter 0.5 mm. longi; stipellae deficientes. *Racemi* axillares, ad 7 mm. longi, pedunculo communi petiolo subaequali vel eum paulo superante suffulti; pedicelli circiter 1 mm. longi; bracteae deciduae. *Calycis* tubus 1.5 mm. longus, lobi filiformes, ad 2 mm. longi. *Vexillum* late obovatum, 6 mm. longum, 4 mm. latum; alae carinae aequilongae, 5.5 mm. longae.

Kansu or Shensi, Hosie, 1 (Herb. Kew!).

Indigofera ichangensis, Craib. Sp. nov., ab affini *I. Carlesii*, Craib, ramulis foliorumque rachi glabris vel fere glabris recedit.

Ramuli teretes, glabri vel fere glabri, primo plus minusve straminei, mox brunneo- vel fusco-corticati, striati. *Folia*

9-13—foliolata, 15-22 cm. longa, petiolo 2-15 mm. longo adjecto; foliola opposita vel inferiora alterna, ovato-lanceolata, ovata ad obovata, basi cuneata vel rotundato-cuneata, apice subacuta vel rotundata, mucronata, 2-7 cm. longa, 1.2-4.2 cm. lata, pagina utraque pilis albis medifixis breviusculis tenuiter instructa, chartacea, nervis lateralibus utrinque circiter 6 supra conspicuis subtus prominulis, nervulis supra conspicuis subtus subprominulis; petioluli 2-3 mm. longi; stipellae parvae. *Racemi* axillares, folia subaequant, pedunculo communi 2.5-4 cm. longo ut rachi glabro suffulti; pedicelli graciles, 2.5 mm. longi; bractae parvae, deciduae. *Calycis* tubus circiter 1.5 mm. longus, lobus infimus deltoideus, acutus, circiter 1 mm. longus, lateralibus paululo longior. *Vexillum* oblongum, fere 12 mm. longum, 7 mm. latum, ungui fere 1.5 mm. longo suffultum; alae ad 13 mm. longae et 2 mm. latae; carina ad 13.5 mm. longa, 3.5 mm. lata.

Hupei: Ichang, Henry, 3512 (Herb. Kew! Edinburgh!).

Indigofera Kirilowii, Maxim. ex Palibin, var. *coreana*, Craib, var. nov., a typo racemis folia superantibus, calyce longiore, lobis angustioribus recedit.

Caulis rectus, ad 44 cm. altus, primo pilis albidis medifixis adpressis hic illic parcissime instructus, ad 3 mm. diametro. *Folia* 7-11—foliolata, 6.5-10 cm. longa, petiolo 1.5-2 cm. longo indumento ut caule rachique suffulta; stipulae circiter 8 mm. longae; foliola opposita vel rarissime alterna, inaequilatera, ovato-elliptica vel subelliptica interdum subrotundata, apice acutiuscula, obtusa vel rotundata, mucronata, basi late cuneata vel rotundata, 20-26 mm. longa, 11-20 mm. lata, chartacea, pagina utraque pilis albis breviusculis medifixis, superiore densius, instructa, nervis lateralibus utrinque 4-6 supra obscuris subtus subprominulis, costa supra immersa subtus prominula, nervis transversis uti reticulatione gracili subtus subconspicuis; petioluli circiter 2-2.5 mm. longi; stipellae ad 2.5 mm. longae. *Racemi* axillares, foliis circiter duplo longiores; pedunculus communis petiolo longior; pedicelli graciles 2.5-3 mm. longi; bractae deciduae, 2 mm. longae. *Calycis* tubus ad 2 mm. longus, lobo infimo subaequilongus. *Vexillum* late oblongum, apice rotundatum, 17 mm. longum, 11 mm. latum; alae 17 mm. longae, 5 mm. latae; carina 17 mm. longa.

Corea: Chemulpo, Carles, 173 (Herb. Kew! Edinburgh!); West Coast, 39° N. Perry, 22 (Herb. Kew!).

Indigofera lenticellata, Craib. Sp. nov., ab *I. Hosiei*, Craib, calycis lobis brevioribus recedit.

Fruticulus 30-60 cm. altus (ex Wilson); ramuli primo pilis albis adpressis medifixis tecti, mox glabri, cortice rubro-brunneo

lenticellato obtecti. *Folia* 5-9—foliolata, 8-20 mm. longa, petiolo 3-6 mm. longo suffulta; stipulae circiter 1.5 mm. longae; foliola opposita, elliptica ad obovata, apice rotundata vel truncata, breviter mucronata, basi rotundata vel cuneato-rotundata, ad 7 mm. longa et 5 mm. lata, rigida, pagina utraque pilis albidis densius tecta, nervis obscuris, breviter petiolulata; stipellae minutae. *Racemi* axillares, ad 27 mm. longi; pedicelli breves; bractee parvae, deciduae. *Calycis* tubus ad 1 mm. longus; lobus infimus late lanceolatus, acutiusculus, tubo subaequalis. *Vexillum* oblongum, 6.5 mm. longum, 4 mm. latum; alae vexillo aequilongae, 2 mm. latae; carina fere 7 mm. longa, 2.25 mm. lata.

Western China: Min Valley, Wilson, 3386 (Herb. Kew!).

Indigofera mengtzeana, Craib. Sp. nov., ab *I. sensitiva*, Franchet, stipulis circiter 3 mm. longis, stipellis parvis vel minutis, bracteis vix conspicuis distinguenda.

Suffrutex 1.5 m. altus (ex Henry); ramuli primo pilis medifixis albidis adpressis parce instructi, plus minusve glabrescentes, conspicue nodosi, ad 3 mm. diametro. *Folia* 13-17—foliolata, 4-7 cm. longa, petiolo 15-20 mm. longo ut rachi supra canaliculato pilis albis medifixis brevibus adpressis parcius instructo suffulta; stipulae graciles, circiter 3 mm. longae; foliola opposita, anguste oblonga, oblonga vel elliptico-oblonga vel terminalia oblongo-obovata, apice rotundata, breviter mucronata, basi cuneata, late cuneata vel rotundata, 5-13 mm. longa, 3.5-6 mm. lata, chartacea, supra glabra, subtus pilis albis medifixis parce instructa, nervis lateralibus obscuris vel subobscuris, petiolulis gracilibus 1 mm. longis suffulta; stipellae parvae vel minutae. *Racemi* axillares, confertiflori, ad 3.5 cm. longi; pedicelli graciles, sub anthesin circiter 1 mm. longi; bractee deciduae, pedicellis paulo longiores. *Calycis* tubus 1.5 mm. longus; lobi lanceolati, acuti, infimo tubo paulo longiore. *Vexillum* late ellipticum, 6.5 mm. longum, 5 mm. latum; alae 6.5 mm. longae, 2 mm. latae; carina 6.5 mm. longa, 2.5 mm. lata. *Legumen* ad 24 mm. longum.

Yunnan: Mengtze woods, 1650 m., Henry, 10627 (type—Herb. Kew! Edinburgh!). Yunnansen, Maire, 1978 (Herb. Edinburgh! Kew!).

Indigofera Monbeigii, Craib. Sp. nov., ab affini *I. rigioclada*, Craib, stipulis longioribus facile distinguenda.

Ramuli primo adpresse pubescentes, plus minusve glabrescentes, brunneo- vel fusco-brunneo-corticati, striati, ad 4 mm. diametro. *Folia* 7-11—foliolata, 2.5-6.5 cm. longa, petiolo

ad 1 cm. longo ut rachi adpresse pubescente supra canaliculato suffulta; stipulae subulatae, circiter 4 mm. longae, pubescentes; foliola opposita, oblonga, elliptico-oblonga vel terminalia oblanceolata vel late oblanceolata, basi cuneata vel late cuneata, apice plerumque rotundata, mucronata, 7-17 mm. longa, 3-7.5 mm. lata, chartacea, pagina utraque tenuiter adpresse albo-pubescentia, nervis lateralibus obscuris, petiolulis circiter 1 mm. longis suffulta; stipellae parvae. *Racemi* axillares, ad 3.5 cm. longi, breviter pedunculati; bractee deciduae; pedicelli circiter 2 mm. longi, ut rachis adpresse albo-pubescentes. *Calycis* tubus 1.5 mm. longus; lobi lanceolati, acuti, infimo reliquis paululo longiore 2.25 mm. longo, 0.75 mm. lato. *Vexillum* oblongo-ellipticum, sessile, 10.5 mm. longum, 6 mm. latum; alae vexillum vix aequantes; carina 10 mm. longa, 2.5 mm. lata.

S.W. China, Monbeig (Herb. Kew!). N.W. Yunnan, Monbeig, 67 (Herb. Edinburgh!).

Indigofera Myosurus, Craib. Sp. nov., ab affini *I. Cooperii*, Craib, foliorum rachi pedicellis racemorumque rachi sparse adpresse brunneo-pubescentibus, calycis lobis longioribus recedit.

Fruticulus 60 cm. altus (fide Wilson); ramuli primo angulati, pilis brunneis medifixis adpressis hic illic instructi, mox glabri, fere teretes, ad 2.5 mm. diametro. *Folia* 9-19—foliolata, petiolo 5-9 mm. longo ut rachi supra canaliculato pilisque brunneis medifixis sparse instructo suffulta; stipulae circiter 5 mm. longae; foliola opposita, oblonga, oblanceolata vel obovato-oblanceolata, apice obtusa vel rotundata, mucronata, basi parum inaequalia, cuneata vel late cuneata, 10-19 mm. longa, 3.5-7.5 mm. lata, rigide chartacea, pagina utraque pilis albidis medifixis sparse instructa, nervis lateralibus utrinque 4-6 supra obscuris subtus subprominulis; petioluli circiter 1 mm. longi; stipellae graciles, petiolulis subaequilongae. *Racemi* axillares, ad 8 cm. longi, pedunculo communi 10-18 mm. longo suffulti; pedicelli graciles, ad 6 mm. longi; bractee sub anthesin persistentes, circiter 2.5 mm. longae. *Calycis* tubus 1.75 mm. longus, lobus infimus 2.5 mm. longus. *Carina* 1 cm. longa, alis subaequalis.

W. China, Wilson, 3382 (Herb. Kew!).

Indigofera Pampaniniana, Craib. Sp. nov., ab *I. Duclouxii*, Craib, cui affinis, indumento partium omnium densiore, foliorum nervis vix obscuris, floribus minoribus distinguenda.

Fruticulus 20-30 cm. altus (ex Maire); ramuli novelli pilis brunneis vel brunneis albisque immixtis divergentibus instructi, mox glabri, brunneo-corticati. *Folia* 9-17—foliolata, petiolo

communi ad 22 mm. longo indumento ut rachi ramulisque juvenilibus suffulta; stipulae lineari-lanceolatae, 7-8 mm. longae; foliola oblonga, utrinque rotundata, apice mucronata, ad 23 mm. longa et 10 mm. lata, pagina utraque laxè tenuiter pilosa, nervis lateralibus utrinque circiter 6 supra obscuris subtus cum nervis transversis conspicuis; petioluli vix 2 mm. longi; stipellae filiformes, 3 mm. longae. *Racemi* axillares, ad 5 cm. longi, pedunculo communi 15-20 mm. longo indumento ut rachi ramulisque suffulti; pedicelli 3-4 mm. longi; bracteae deciduae, 2.5-3 mm. longae. *Calycis* tubus 2.5 mm. longus; lobus infimus lanceolatus, acutus, tubo aequilongus; lobi laterales late lanceolati, supremi fere deltoidei. *Vexillum* 13 mm. longum, 8 mm. latum; alae 12 mm. longae; carina sub anthesin haud visa.

Yunnansen, Maire, 2427 (Herb. Edinburgh! Kew!), 1602, 818 (Herb. Edinburgh!).

Indigofera Parkesii, Craib. Sp. nov., habitu *I. venulosae*, Champion, similis sed caulibus juventute breviter tomentellis, foliis pagina utraque pubescentibus differt.

Caulis (ramulusve?) flexuosus, primo breviter tomentellus, mox breviter crispatis pubescens, ad 2.5 mm. diametro. *Folio* 11-13—foliolata, ad 10 cm. longa, petiolo 7-9 mm. longo ut rachi breviter crispatis pubescente suffulta; stipulae ad 8 mm. longae; foliola opposita vel superiora alterna, inaequilatera, plerumque elliptica vel elliptico-rotundata vel terminalia fere obovata, apice plerumque rotundata, mucronata, basi rotundata, truncata vel subcordata, 13-25 mm. longa, 10-18 mm. lata, rigide chartacea, supra pilis medifixis albidis sparse instructa, subtus pallidiora, pilosula, nervis lateralibus utrinque 6 intra marginem arcuatis supra subobscuris subtus prominentibus, nervis transversis subtus prominulis, petiolulis brevibus suffulta; stipellae conspicuae, rigidae, ad 3.5 mm. longae. *Racemi* axillares, foliis plerumque breviores, pedunculo communi petiolo longiore indumento ut rachi cauleque suffulti; pedicelli 2-2.5 mm. longi; bracteae plus minusve persistentes, 3-4 mm. longae. *Calycis* tubus lobo infimo subaequilongus, 1.5 mm. longus. *Vexillum* 13 mm. longum, 5.5 mm. latum; alae 12 mm. longae; carina acuminata, 14 mm. longa.

China (without definite locality). Parkes (Herb. Kew!).

Indigofera pendula, Franchet, forma **umbrosa**, Craib, forma nov., a typo statura minore (ex Forrest), foliis longioribus, calycis lobis brevioribus latioribus recedit.

"Damp, shady pine forests on the eastern flank of the Lichiang Range. Lat. 27° 30' N. 11,000 ft." Forrest, 2431 (Herb. Edinburgh!).

Indigofera Potaninii, Craib. Sp. nov., ab affini *I. szechuensis*, Craib, corolla brevior, stipulis longioribus facile distinguenda.

Ramuli primo dense adpresse albo-pubescentes, mox glabri vel subglabri, cortice rubro-brunneo obtecti, ad 2 mm. diametro. *Folia* 5-9—foliolata, ad 4.5 cm. longa, petiolo 13-20 mm. longo ut rachi supra canaliculato pilisque albis medifixis adpressis tecti; stipulae subrigidae, vix 4 mm. longae; foliola opposita, oblonga vel obovato-oblonga, apice rotundata, mucronata, basi cuneata vel late cuneata, ad 15 mm. longa et 6.5 mm. lata, pagina utraque pilis medifixis albis instructa, nervis lateralibus cum nervis transversis supra obscuris subtus conspicuis vel subconspicuis, petiolulis circiter 1 mm. longis suffulta; stipellae petiolulis dimidio breviores. *Racemi* axillares, ad 13 cm. longi, pedunculo communi ad 25 mm. longo suffulti; bractae circiter 1.5 mm. longae, deciduae; pedicelli circiter 1.5 mm. longi, pilis albis medifixis obtecti. *Calyx* 2.5 mm. longus, lobo infimo tubo paulo longiore. *Vexillum* 8 mm. longum, 5 mm. latum; alae carinaeque delapsae. *Legumen* ad 3.5 cm. longum, valvis brunneis subglabris; semina ambitu oblonga, straminea vel brunneo-straminea, ad 3.5 mm. longa.

West Kansu, Potanin, anno 1885 (Herb. Kew!).

Indigofera rigioclada, Craib. Sp. nov. ab *I. elliptica*, Roxb., alabastris puberulis, foliolis minoribus recedit.

Fruticulus procumbens, 30-60 cm. altus (ex Forrest); ramuli primo tenuiter adpresse pubescentes, mox glabri, brunneo-corticati. *Folia* ad 1.7 cm. longa, 5-11—foliolata, petiolo ad 5 mm. longo suffulta; stipulae circiter 1 mm. longae; foliola opposita, oblonga, utrinque rotundata apice mucronata, ad 8 mm. longa et 3.5 mm. lata, rigida, pagina utraque pilis adpressis medifixis albidis cum ferrugineis immixtis instructa, nervis obscuris, breviter petiolulata; stipellae minutae. *Racemi* axillares, ad 5 cm. longi, breviter pedunculati; bractae pedicellis subaequales, deciduae; pedicelli circiter 2 mm. longi, ut rachis adpresse pubescentes. *Calycis* tubus 1.5 mm. longus, lobus infimus 2 mm. longus. *Vexillum* 11 mm. longum, 7.5 mm. latum; alae fere 10 mm. longae, 2 mm. latae; carina alis subaequalis, 3 mm. lata, obtusa.

"Eastern flank of the Lichiang Range. Lat. 27° 10' N. Procumbent shrub of 1-2 ft. Flowers rich rose-red. Dry, stony situations amongst scrub and dwarf pine. 9000-10,000 ft." Forrest, 2099 (type—Herb. Edinburgh! Kew!).

"Side valleys on the eastern flank of the Tali Range. Lat. 25° 40' N. Shrub of 3-4 ft. Flowers greyish rose. Open situations amongst scrub. 8000-9000 ft." Forrest, 4235 (Herb. Edinburgh!).

" Eastern flank of the Lichiang Range. Lat. $27^{\circ}15'N$. Prostrate shrub of 9-18 inches. Flowers deep rose. Dry, rocky situations. 10,000-11,000 ft." Forrest, 5633 (Herb. Edinburgh!). Tatsienlu, Pratt, 290 (Herb. Kew!).

Indigofera Souliei, Craib. Sp. nov., ab *I. Henryi*, Craib, foliolorum indumento e pilis longioribus tenuioribus constituto facile distinguenda.

Ramuli primo pilis brunneis densius tecti, mox glabri, cortice brunneo reticulato-striato obtecti. *Folia* 7-13—foliolata, 3-5 cm. longa, petiolo 4-11 mm. longo ut rachi adpresse brunneo-pubescente suffulta; stipulae lanceolatae, acutae, circiter 4 mm. longae, pubescentes; foliola opposita, elliptica vel subelliptica, apice emarginata vel subrotundata, mucronata, basi cuneata vel rotundato-cuneata, 9-19 mm. longa, 4.5-12 mm. lata, chartacea, pagina utraque pilis tenuibus longiusculis instructa, subtus pallidiora, nervis lateralibus obscuris, petiolulis circiter 2 mm. longis suffulta; stipellae petiolulis breviores. *Racemi* ad 15 cm. longi, pedunculo communi 10-12 mm. longo ut rachi pubescente suffulti; bracteae deciduae; pedicelli graciles, ad 4 mm. longi. *Calycis* tubus 1.5 mm. longus, lobus infimus tubo paululo longior. *Vexillum* 9.5 mm. longum, 4.5 mm. latum; alae maturae mancae tantum visae; carina 8.5 mm. longa, breviter acuminata. *Ovarium* pubescens.

Tatsienlu, Soulie, 870 (Herb. Kew!).

Indigofera sticta, Craib. Sp. nov., ab *I. reticulata*, Franchet, foliolis 3-5 tantum haud reticulatis, stipulis stipellisque minoribus distinguenda.

Suffrutex caulibus erectis simplicibus ad 23 cm. altis angulatis pilis brunneis medifixis maculatis cortice stramineo obtectis. *Folia* 3-5—foliolata, ad 4 cm. longa, petiolo 11-20 mm. longo ut rachi supra canaliculato pilis brunneis medifixis adpressis maculato suffulta; stipulae ad 3.5 mm. longae; foliola opposita, elliptica vel late elliptica, utrinque rotundata, apice mucronata, ad 25 mm. longa et 17 mm. lata, pagina utraque pilis medifixis adpressis, sed margine costaeque subtus densius instructa, nervis lateralibus utrinque 5-6 supra subconspicuis subtus conspicuis, petiolo ad 2 mm. longo suffulta; stipellae parvae vel minutae. *Racemi* ad 5 cm. longi, pedunculo communi 12-32 mm. longo suffulti; bracteae deciduae, ad 2 mm. longae; pedicelli sub anthesin fere 3 mm. longi. *Calycis* tubus circiter 1.75 mm. longus; lobus infimus fere 2.5 mm. longus. *Alabastra* 8 mm. longa; flores expansi haud visi.

Yunnan: Mengtze, 1800 m., Henry, 13720 (Herb. Kew!).

Indigofera subnuda, Craib. Sp. nov., ab affini *I. Fortunei*, Craib, floribus minoribus recedit.

Caules (ramulive ?) glabri. *Folia* 9-11—foliolata, vix matura, ad 7 cm. longa, petiolo 3-4 cm. longo glabro suffulta, rachi glabra supra, apicem versus praecipue, canaliculata; stipulae deciduae, 3.5 mm. longae; foliola opposita, subelliptica vel ovato-elliptica, utrinque pedetentim angustata vel basi rotundata, apice mucrone ad 1.5 mm. longo ornata, ad 18 mm. (mucrone excluso) longa et 9 mm. lata, pagina utraque glabra nisi juventute pilis paucis albis adpressis margine et costa subtus instructa, nervis lateralibus utrinque circiter 6 supra subconspicuis subtus prominulis, nervis transversis uti reticulatione gracili subtus conspicuis; petioluli ad 2 mm. longi; stipellae graciles, petiolulos superantes. *Racemi* axillares, ad 7 cm. longi, pedunculo communi ad 3 cm. longo suffulti; bractae deciduae, circiter 1 mm. longae; pedicelli circiter 2 mm. longi. *Calycis* tubus 1.5 mm. longus, lobi 1 mm. vix attingentes. *Vexillum* 8.5-9 mm. longum, 6-7.5 mm. latum; alae 8 mm. longae, 2 mm. latae; carina 8.5 mm. longa, 2.75 mm. lata.

Hills near Shanghai, Carles, 17th April 1887 (Herb. Edinburgh!).

Evidently the same species is represented by Carles, 57, from Hoochow (Herb. Edinburgh!), but the specimen is without any expanded flower, and has stipules measuring 9 mm. long and 2.5 mm. broad.

Indigofera szechuensis, Craib. Sp. nov., ab *I. rigioclada*, Craib, floribus minoribus distinguenda.

Ramuli primo pilis medifixis albidis brunneisve adpressis densius tecti, mox glabri, cortice brunneo lenticellato obtecti, ad 2.5 mm. diametro. *Folia* 9-11—foliolata, 2.2-4.6 cm. longa, petiolo 5-11 mm. longo ut rachi supra canaliculato parceque adpresse pubescente suffulta; stipulae lanceolatae, acutae, ad 2 mm. longae; foliola opposita, elliptica ad obovata, basi rotundata vel cuneata, apice retusa, breviter mucronata, 5-12 mm. longa, 4-8 mm. lata, chartacea, pagina utraque pilis medifixis rigidiusculis strigosa, subtus pallidiora, nervis lateralibus supra obscuris subtus subconspicuis; petioluli graciles, circiter 1 mm. longi; stipellae haud conspicuae. *Racemi* axillares, ad 5 cm. longi, pedunculo communi 8-27 mm. longo ut rachi adpresse pubescente suffulti; pedicelli circiter 1 mm. longi; bractae pedicellis subaequales, deciduae. *Calyx* fere 1.75 mm. longus; lobi late lanceolati, acutiusculi, inter se subaequales, circiter 1 mm. longi. *Vexillum* fere 9 mm. longum, 8 mm. latum; alae 9.5 mm. longae, 3.5 mm. latae; carina 9.5 mm. longa, 2.5 mm. lata.

Western Szechuan, Wilson, 3075a, coll. May 1908 (Herb. Kew!).

Indigofera Wilsonii, Craib. Sp. nov., ab *I. rigioclada*, Craib, et *I. Monbeigii*, Craib, stipulis corollaeque longioribus distinguenda.

Ramuli primo adpresse pubescentes, plus minusve glabrescentes, cortice pallido vel brunneo lenticellato obtecti. *Folia* 7-11—foliolata, 3-5 cm. longa, petiolo 5-14 mm. longo ut rachi supra canaliculato parceque adpresse pubescente suffulta; stipulae subulatae, circiter 7 mm. longae; foliola opposita, rarissime subopposita, plerumque oblongo-elliptica vel elliptica, utrinque rotundata vel terminalia basi late cuneata, omnia apice breviter mucronata, ad 16 mm. longa et 10 mm. lata, pagina utraque pilis rigidiusculis albis medifixis scabrida, nervis obscuris, petiolulis 1 mm. longitudine vix attingentibus suffulta; stipellae filiformes, petiolulis breviores. *Racemi* axillares, ad 5 cm. longi, pedunculo communi ad 3.3 cm. longo subterete suffulti; bractaeae sub anthesin persistentes, ad 3.5 mm. longae; pedicelli circiter 3 mm. longi. *Calycis* tubus 2.5 mm. longus; lobus infimus lanceolatus, acutus, 3 mm. longus. *Vexillum* obovatum, 14 mm. longum, 8 mm. latum; alae 14.5 longae, 3.75 mm. latae; carina 15 mm. longa, 4.75 mm. lata.

West Szechuan, Wilson, 3074, coll. May 1908 (Herb. Kew!).

II. ENUMERATION OF SPECIES.

1. **Indigofera linifolia**, Retz. Obs. iv, 29 (1786); Baker in Hook. fil. Fl. Brit. Ind. ii, 92 (1876); Franchet Pl. Delavay. 153 (1889).

Yunnan: margins of roads to Kiang-yn, Delavay, 1972.

2. **Indigofera trifoliata**, Linn. Cent. Pl. ii, 29 (1756) et Amoen. Acad. iv, 327 (1759); Baker in Hook. fil. Fl. Brit. Ind. ii, 96 (1876); Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 157 (1886); Franchet Pl. Delavay. 153 (1889); Diels in Engler Jahrb. xxix, 411 (1900); Dunn et Tutchet Fl. Kwangtung in Kew Bull. Add. Ser. x, 75 (1912).

Yunnan: Tapintze, Delavay, 2255; Mengtze, Henry, 9347, 9347a; Yunnanfu, Ducloux, 771.

Kweichau: Tchai-choui-lo, Esquirol, 1983.

Kwangtung: Ford, 28; near Canton, August 1864, Herb. Hance, 5685 et September 1869, Sampson in Herb. Hance, 5685.

Hupeh: Ichang, Henry, 683, 999, 4389, 4389a.

3. **Indigofera sericophylla**, Franchet Pl. Delavay. 155 (1889).

Yunnan: near Tapintze, above Che-tong, Delavay, 2569.

4. *Indigofera dolichochaete*, Craib, nom. nov.

I. mollis, Franchet Pl. Delavay. 156 (1889) *non* Ecklon et Zeyher (1834).

Yunnan : above Tapintze, Chouang-che-teou, Delavay, 3308.

5. *Indigofera scabrida*, Dunn in Journ. Linn. Soc. xxxv; 487 (1903).

Yunnan : eastern flank of the Lichiang Range, 3000-3300 m., Forrest, 6314; Mengtze, 1380-1800 m., Henry, 9686a, 9686b; Yunnanfu, Ducloux, 533; near Yunnansen, Maire, 2223, 2313, 2354.

West China : Wilson, 3385.

6. *Indigofera caudata*, Dunn in Gard. Chron. xxxii, 210 (1902).

Yunnan : Szemao forests, 1350-1500 m., Henry, 12166, 12166a, 12166b.

Cult. Hort. Kew.

7. *Indigofera hirsuta*, Linn. Sp. Pl. 751 (1753); Bentham Fl. Hongk. 76 (1861); Baker in Hook. fil. Fl. Brit. Ind. ii. 98 (1876); Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 157 (1886); Dunn et Tutchet Fl. Kwangtung in Kew Bull. Add. Ser. x, 75 (1912).

Kwangtung : Pakhoi, Playfair, 80; Macao, Vachell, 227, Callery, 126, Nelson; Hongkong, Hinds, Wilford, 167, Wright, 117, Lamont in Herb. Hance, 576; Swatow, Dalziel.

Chekiang : Chusan, W. Brown, 63.

China, without definite locality, Macartney and Staunton.

8. *Indigofera stachyodes*, Lindl. Bot. Reg. t. 14 (1843).

I. Dosua, Ham., var. *tomentosa*, Baker in Hook. fil. Fl. Brit. Ind. ii, 102 (1876).

Yunnan : Szemao hills, 1500 m., Henry, 12276; Salween valley, lat. 25° 5' N., 900 m., Forrest, 5503.

9. *Indigofera Parkesii*, Craib.

I. venulosa, Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 158 (1886) in part *vox* Champion.

China : without definite locality, Parkes.

10. *Indigofera Pampaniniana*, Craib.

Yunnan : around Yunnansen, Maire, 818, 1602, 2427.

Probably identical with *I. Mairei*, var. *proterantha*, Pampanini.

11. *Indigofera Duclouxii*, Craib.

Yunnan : Yunnanfu, Ducloux, 706.

12. *Indigofera argutidens*, Craib, nom. nov.

I. leptosepala, Diels in Notes, Roy. Bot. Gard., Edin., No. xxv, 245 (1912) et xxxii, 150 (1912) *non* Nuttall (1838).

Yunnan : eastern flank of the Lichiang Range, 3000–3330 m., Forrest, 2651.

13. *Indigofera Dielsiana*, Craib.

I. pendula, Franchet, var., Diels in Notes, Roy. Bot. Gard., Edin., No. xxxiii, 219, 220 (1912).

Yunnan : eastern flank of the Tali Range, 2100–2700 m., Forrest, 4251, 4258 ; Yunnanfu, Ducloux, 817.

14. *Indigofera Balfouriana*, Craib.

Yunnan : eastern flank of the Lichiang Range, 2700–3000 m., Forrest, 5627.

15. *Indigofera Fortunei*, Craib.

I. venulosa, Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 158 (1886) *vis* Champion.

China : Fortune, 43 ex. Herb. Benth., Fortune, sine num. ex Herb. Hook.

Kiangsi : Kiukiang, Maries ; La Schan Mts., Maries, 227.

Kiangsu : near Shanghai, Fengwanshan, Herb. Forbes ; Chinkiang, Carles, T. L. Bulloch.

? Cult. Hort. Kew ex Hongkong.

16. *Indigofera Cooperii*, Craib.

I. macrostachya, Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 157 (1886) in part, *vis* Vent.

Chekiang : Ningpo district, Cooper, May 1884.

17. *Indigofera Myosurus*, Craib.

West China, 900 m., Wilson, 3382.

18. *Indigofera elliptica*, Roxb. Hort. Beng. 57 (1814)—
nomen tantum—et Fl. Ind. iii, 380 (1832), *nec* E. Mey. (1835).

I. pulchella, Baker in Hook. fil. Fl. Brit. Ind. ii, 101 (1876) in part.

Yunnan : Red River, Manpan, Henry, 10980 ; Szemao forests, 1200 m., Henry, 12781 ; ? Yunnansen, Maire, 1397 ; Bourne, 29.

19. **Indigofera Kirilowii**, Maxim. ex Palibin in Act. Hort. Petrop. xvii, 62, t. 4 (1899), in part.

I. macrostachya, Bunge Enum. Pl. China bor. 16 (1834); Franchet Pl. David. 82 (1884); Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 157 (1886) in part, *viz* Vent.

North China: Bunge, Bretschneider, 187, Tatarinow, Daniell, Mrs. B. Stuart.

Chihli: Pekin, Carles, Bushell.

Shinking: Talienwan, Williams in Herb. Hance, 6547, Swinhoe, Urquhart, 13, Birnie; Chienshan, Ross, 506.

Corea: Seoul, Sontag; Chemulpo, Jack.

Shantung: Williamson, Couling; Chefoo, Perry, Hancock, 21, Carmichael in Herb. Forbes, 111.

- I. Kirilowii**, Maxim. ex Palibin, forma **coreana**, Craib.

I. macrostachya, Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 157 (1886) in part, *viz* Vent.

Corea: Chemulpo, Carles, 173; West Coast, lat. 39° N. Perry, 22.

I. Kirilowii, if all the plants cited above really belong, is somewhat variable, and probably the form described as *coreana* should not then be kept apart, although the calyx is rather larger and the racemes are much longer in proportion to the leaves than usual. The Chefoo plant is also somewhat distinct in the fewer and more rigid hairs on the leaflets. Allied to this species, and probably identical with it, is the plant (Purdom, 123) recently introduced by Messrs. Veitch from Shensi, Wutai Shan.

20. **Indigofera rigioclada**, Craib.

I. chaetodonta, Franchet, var., Diels in Notes, Roy. Bot. Gard., Edin., No. xxxii, 97 (1912).

I. Gerardiana, Diels in Notes, Roy. Bot. Gard., Edin., xxxii, 218 (1912), *non* Wall.

Yunnan: eastern flank of the Lichiang Range, 2700–3300 m., Forrest, 2099, 5633; eastern flank of the Tali Range, 2400–2700 m., Forrest, 4235.

21. **Indigofera Monbeigii**, Craib.

S.W. China, Monbeig; N.W. Yunnan, Monbeig, 67.

W. Szechuan, Wilson, 3075, 3080 (May 1908).

22. **Indigofera Wilsonii**, Craib.

W. Szechuan, Wilson, 3074.

23. *Indigofera ichangensis*, Craib.

Hupeh : Ichang, Henry, 3512, 3568 ; W. Hupeh, Wilson, 466 ;
Central China, Fang, Wilson, 2034.

I. ichangensis, Craib, forma *leptantha*, Craib.

W. Hupeh : Wilson, 3081 ; Ichang, Henry, 3865.

I. ichangensis, Craib, forma *rigida*, Craib.

Hupeh, Wilson, 3083, Henry, 4259, 6280.

I. ichangensis, Craib, forma *calvescens*, Craib.

W. Hupeh, Wilson, 3082.

The writer had at first regarded the above as representing four distinct species, but on further examination he found no definite, reliable character by which to separate them, although the plants at first sight do appear distinct. The first form is characterised by the rather long racemes of narrow flowers, the second by the rather rigid leaves, and the third by the very scattered hairs (probably at length deciduous) on the under surface of the leaflets.

24. *Indigofera Carlesii*, Craib.

Kiangsu : Chinkiang, Carles.

25. *Indigofera chalara*, Craib.

Central China : Hsing Shan cliffs, Wilson, 1230 (coll. May 1901) ; West Hupeh, Wilson, 1230 (coll. June 1900).

26. *Indigofera dichroa*, Craib.

W. Szechuan, Wilson, 3084.

27. *Indigofera venulosa*, Champion ex Benth in Hook. Kew

Journ. Bot. iv, 44 (1852) ; Benth in Fl. Hongk. 77 (1861) ;
Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 158 (1886) in part ;
Dunn et Tutch. Fl. Kwangtung in Kew Bull. Add. Ser. x,
75 (1912).

Kwangtung : Hongkong, Champion, 255, Wright,
118, Herb. Hance, 1166 ; top of hill above 200 yds. rifle range,
Urquhart ; Mount Victoria, Lamont.

28. *Indigofera Faberii*, Craib.

I. venulosa, Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 158
(1886) in part, vix Champ.

Chekiang, Tien Tai Mts., 300 m., Faber, 243.

29. **Indigofera pendula**, Franchet Pl. Delavay, 156 t. 37 (1889).

Yunnan: near Langkong, Yang-in-chan, 2500 m., Delavay, 1980; Hee-chan-men, Delavay; side valleys of eastern flank of Lichiang Range, 2550-3150 m., Forrest, 5562; eastern flank of Lichiang Range, 2700-3000 m., Forrest, 2197.

30. **Indigofera decora**, Lindl. in Journ. Hort. Soc. i, 68 (1846) et Bot. Reg. t. 22 (1846); Bentham Fl. Hongk. 77 (1861); Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 156 (1886); Dunn et Tutchet Fl. Kwangtung in Kew Bull. Add. Ser. x, 75 (1912).

China, Fortune, 260.

Anwei: Wuhu, Carles.

Cult. Hort. Soc. Lond., Kew, Chelsea, Vilmorin.

Hongkong, East Point, Eyre icon ined. in Herb. Kew.

31. **Indigofera Delavayi**, Franchet Pl. Delavay, 154 (1889).

Yunnan: Tapintze, near Tali, Delavay, 512; near Tapintze, Delavay, coll. 28th September 1888.

32. **Indigofera hendecaphylla**, Jacq. Ic. Pl. Rar. 14 t. 570 (1786-93); Bentham Fl. Hongk. 76 (1861); Baker in Hook. fil. Fl. Brit. Ind. ii, 98 (1876); Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 156 (1886); Dunn et Tutchet Fl. Kwangtung in Kew Bull. Add. Ser. x, 75 (1912).

Yunnan: Szemao, 1350 m., Henry, 12308, 12495; gorge between the Tengchuan and Langkong valleys, 2100 m., Forrest, 5587.

Hongkong, Wright, 477.

33. **Indigofera subnuda**, Craib.

Kiangsu: Hills near Shanghai, Carles; Hoochow, Carles, 57.

Chekiang: Carles et Forbes, coll. 17th April 1881.

34. **Indigofera chaetodonta**, Franchet Pl. Delavay, 155 (1889).

Yunnan: near Langkong, Hee-chan-men, 3000 m., Delavay, 2848; along the base of the eastern flank of the Lichiang Range, 2700 m., Forrest, 6032.

35. **Indigofera Silvestrii**, Pampanini in Nuov. Giorn. Bot. Ital. xvii, 397 (1910).

Hupei: Siang-yang, 100 m., Silvestri, 1091.

36. *Indigofera sensitiva*, Franchet Pl. Delavay, 157 (1889).

Yunnan: Ki-mi-se, Kiang-yn, 2000 m., Delavay, 3022; near Tapintze, Delavay; beneath Pien-kio, Delavay; south end of Hoching valley, 2400 m., Forrest, 7353; gorge between the Tengchuan and Langkong valleys, 2100 m., Forrest, 5588.

37. *Indigofera mengtzeana*, Craib.

Yunnan: Mengtze woods 1650 m., Henry, 10627; near Yunnansen, Maire, 1978.

38. *Indigofera Pseudotinctoria*, Matsumura in Bot. Mag. Tokyo xvi, 62 (1902).

I. tinctoria, Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 157 (1886) in part *viz* Linn.

I. Bungeana, Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 156 (1886) in part *viz* Walp.

China, without definite locality, Fortune, 256.

Yunnan: Monbeig, Monbeig, 68; Mengtze plain, Hancock, 333; Mengtze, 1380 m., Henry, 10387a; near Yunnansen, Maire, 500, 1619.

Szechuan, Mesny.

Hupei: Henry, 36, 1926, 6062, Wilson, 408, 2711, 786, 3489, 3490, 3076 (the last four in 1907 expedition).

Kwangtung: Ford, 56.

Kiangsi: Kiukiang, Herb. Forbes, 93, 121.

Kiangsu: Chinkiang, Bulloch.

39. *Indigofera Anil*, Linn. Mant. 272 (1771); Benth. Fl. Hongk. 77 (1861); Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 155 (1886); Dunn et Tutch. Fl. Kwangtung in Kew Bull. Add. Ser. x, 75 (1912).

Kwangsi: Lungchow, Morse, 269.

Kwangtung: Pakhoi, Playfair, 11; Hongkong, Seeman, 2486, Herb. Hance, 575.

40. *Indigofera Bungeana*, Walp. in Linnaea xiii, 525 (1839); Franchet Pl. David. i, 82 (1884); Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 156 (1886) in part.

I. micrantha, Bunge Enum. Pl. China bor. 16 (1834) *non* Desv. *nec* E. Mey.

North China: Bunge, Bretschneider, Potanin; Pekin, foot of Mount Conolly, Carles; Pekin, Williams.

This species, so far as the writer has seen, is confined to North China. The specimen recorded by Diels (Engler Jahrb. xxix, 411) from Ichang may be *I. Pseudotinctoria*.

41. *Indigofera Hosiei*, Craib.
Kansu or Shensi, Hosie, 1 (1910).
42. *Indigofera lenticellata*, Craib.
West China: Min valley, 1350 m., Wilson, 3386.
43. *Indigofera sticta*, Craib.
Yunnan: Mengtze, 1800 m., Henry, 13720.
44. *Indigofera reticulata*, Franchet Pl. Delavay, 153 (1889).
I. chaetodonta, Diels in Notes, Roy. Bot. Gard., Edin., No. xxxiii, 218 (1912) *non* Franchet.
Yunnan: Hoang-li-pin, above Tapintze, 2000 m., Delavay, 1964; eastern flank of Tali Range, 2400 m., Forrest, 4234; S.W. Yunnan, Monbeig.
45. *Indigofera szechuensis*, Craib.
W. Szechuan, Wilson, 3075a.
46. *Indigofera Potaninii*, Craib.
West Kansu, Potanin anno 1885.
47. *Indigofera Souliei*, Craib.
Tatsienlu, Soulie, 870, Pratt, 285, 729.
48. *Indigofera amblyantha*, Craib.
West Hupeh, Wilson 3077 (type), 3078, 3087a, 3079 (all coll. 1907), 2017 (Veitch expedition).
It is probable that more than one species is represented by the collections quoted, e.g. 3078a and 3079 have larger flowers than in the type, the former reaching nearly 8 mm. and the latter 7 mm., but with the present available material the writer is disposed to regard them all as forms of one species.
49. *Indigofera Mairei*, Pampanini in Nuov. Giorn. Bot. Ital. xvii, 16 (1910).
Yunnan, Maire, 146; near Yunnansen, Maire, 144, 220, 1803, 1850.
Allied to *I. Mairei* is Wilson, 3384 (May 1904) from Tung valley.
50. *Indigofera Henryi*, Craib.
Yunnan: Mengtze, rocky mountains, 1650–1950 m., Henry, 10050a, 10050b; near Yunnansen, Maire, 3, 494, 495, 521, 2016, 2626.

Probably some of the plants collected by Maire may eventually prove distinct.

I. Henryi, Craib, var. **silvarum**, Craib.

Yunnan: Mengtze, wooded glens, 1500-1800 m., Hancock, 368.

51. **Indigofera cinerascens**, Franchet Pl. Delavay, 153 (1889).

Yunnan: Tapintze, Delavay, 519; Long-teon-chan, anno 1888, Delavay.

52. **Indigofera Hancockii**, Craib.

Yunnan: Mengtze mountains, 1500-1950 m., Hancock, 332, ? Henry, 13719.

53. **Indigofera Forrestii**, Craib.

Yunnan: eastern flank of the Tali Range, 2400-2700 m., lat. 25° 40' N., Forrest, 7000.

54. **Indigofera nigrescens**, Kurz ex King et Prain in Journ. As. Soc. Beng. lxxvii, 286 (1898).

Yunnan: Mengtze woods, 1650 m., Henry, 11212; Szemao, grass mountains, 1800 m., Henry 13716.

55. **Indigofera galegoides**, DC. Prodr. ii, 225 (1825); Baker in Hook. fil. Fl. Brit. Ind. ii, 100 (1876).

China, Morse, 269.

56. **Indigofera Teysmannii**, Miq. Fl. Ind. Bat. i, 1, 1083 (1855).

I. Benthamiana, Hance in Ann. Sc. Nat. 4^e ser. xviii, 219 (1862); Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 156 (1886).

Kwangtung: Whampoa, Herb. Hance, 6063.

57. **Indigofera atropurpurea**, Ham. ex Roxb. Hort. Beng. 57 (1814)—nomen tantum—et Fl. Ind. iii, 381 (1832); Baker in Hook. fil. Fl. Brit. Ind. ii, 101 (1876) in part; Forbes et Hemsl. in Journ. Linn. Soc. xxiii, 156 (1886) in part; Dunn et Tutchet Fl. Kwangtung in Kew Bull. Add. Ser. x, 75 (1912) in part.

Kwangtung: Staunton; Shiu Hing Pass, Ford.

Yunnan: Mengtze, 1380-1500 m., Henry, 9720, 9720a?

The Yunnan plant is provisionally referred to this species, which is rather imperfectly known, but so far as the writer is aware the Kwangtung plant is probably the true plant of Hamilton. The Fukwing plant, collected by Krone and named *I. atropurpurea* by Hance, does not belong to the genus.

Species Excludendae.

Indigofera chinensis, Vogel in Nov. Act. Nat. Cur. xix; Suppl. i, p. 14.

Indigofera rotundifolia, Lour. Fl. Coch. 458.

From the descriptions of these two species it is highly probable that they do not belong to the genus.

Indigofera melilotoides, Hance in Journ. Bot. 163 (1869) = *Astragalus*.

Species Incertae Sedis.

Indigofera alba, Goualt in Rev. Hort. Ser. iv, iii, p. 361 t. 19.

Indigofera macrostachya, Vent. Jard. Malm. p. et t. 44.

Indigofera virgata, β *parvifolia*, DC. Prodr. ii, 224.

Indigofera subulata, Diels in Engler Jahrb. xxix, 411 an Vahl?

Indigofera tinctoria, auct. var. probabiliter = *I. Pseudo-tinctoria*.

Indigofera trita, Loureiro an Linn. f.?

Indigofera heterantha, Franchet Pl. Delavay, 154 an Wall?

III. ARTIFICIAL KEY TO CHINESE SPECIES OF INDIGOFERA.

The numbers in heavy type refer to the preceding enumeration.

- | | |
|--|------------------------------------|
| 1. Leaves simple | I. <i>I. linifolia</i> . |
| Leaves compound | 2. |
| 2. Leaflets 3 | 3. |
| Leaflets more than 3 | 6. |
| 3. Racemes sessile, leaflets glandular, with few adpressed hairs | 2. <i>I. trifoliata</i> . |
| Racemes peduncled, leaflets not glandular | 4. |
| 4. Leaflets rufo-villous | 3. <i>I. sericophylla</i> . |
| Leaflets (rarely so few as three) with scattered adpressed hairs | 5. |
| 5. Leaflets reticulate | 27. <i>I. venulosa</i> . |
| Leaflets not reticulate | 43. <i>I. sticta</i> . |
| 6. Stem (or branchlets) at least in young stage with spreading or subadpressed hairs | 7. |
| Stem (or branchlets) in young stage glabrous or with closely adpressed hairs | 17. |

7. Gland-tipped hairs present 8.
 Gland-tipped hairs absent 9.
8. Leaflets 11-13, not glandular ciliate, calyx lobes more than twice the tube not glandular, bracts plumose 4. *I. dolichochaete*.
 Leaflets 7-9, rarely 11, glandular ciliate, calyx lobes rather less than twice the tube, glandular, bracts glandular 5. *I. scabrida*.
9. Leaflets glabrous on the upper surface, up to 9 cm. long 6. *I. caudata*.
 Leaflets pubescent on both surfaces, up to 4 cm. long (generally much shorter) 10.
10. Corolla only slightly exceeding the calyx 7. *I. hirsuta*.
 Corolla long exserted 11.
11. Leaflets over 10 pair, racemes dense, longer than the leaves, bracts conspicuous 8. *I. stachyodes*.
 Leaflets under 10 pair 12.
12. Corolla at least 1 cm. long, young stem (or branches) rather densely spreading pubescent 13.
 Corolla not over 1 cm. long, young stem (or branches) with few subspreading hairs 16.
13. Calyx lobes not exceeding 1.5 mm. 9. *I. Parkesii*.
 Calyx lobes exceeding 2 mm. 14.
14. Petiole less than 1 cm. long, stipules 5 mm. long, calyx lobes 4-4.5 mm. long 12. *I. argutidens*.
 Petiole over 2 cm. long, stipules at least 7 mm. long, calyx lobes up to 3 mm. long 15.
15. Corolla 13 mm. long 10. *I. Pampaniniana*.
 Corolla 17 mm. long 11. *I. Duclouxii*.
16. Calyx tube 2 mm. long, lowest lobe 1.5 mm. long 13. *I. Dielsiana*.
 Calyx tube 1 mm. long, lowest lobe 1.25 mm. long 14. *I. Balfouriana*.
17. Corolla at least 1 cm. long 18.
 Corolla less than 1 cm. long 41.
18. Leaflets glabrous or in young stage with a few hairs on margin and costa 15. *I. Fortunei*.
 Leaflets pubescent 19.
19. Medifixed hairs on both surfaces of leaflets 20.
 Medifixed hairs only on lower surface of leaflets 34.
20. Leaflets at least 7 pair 21.
 Leaflets fewer than 7 pair 23.

21. Peduncle decidedly shorter than petiole,
corolla glabrous in bud except margin
of vexillum 18. *I. elliptica*.
Peduncle subequal to or longer than petiole,
corolla in bud pubescent all over 22.
22. Pedicels, rachis of leaf and of raceme glabrous,
calyx lobes less than 1.5 mm. long 16. *I. Cooperii*.
Pedicels, rachis of leaf and of raceme brown
pubescent, calyx lobes up to 2.5 mm. long 17. *I. Myosurus*.
23. Leaflets 5 26. *I. dichroa*.
Leaflets more than 5 (5-foliolate leaves may
occasionally occur) 24.
24. Leaflets mostly opposite (lower 1-2 pair
occasionally alternate) 25.
Leaflets alternate or subalternate 33.
25. Corolla in bud glabrous except at apex and
margin of vexillum 26.
Corolla in bud pubescent all over 28.
26. Peduncle shorter than petiole 18. *I. elliptica*.
Peduncle longer than petiole 27.
27. Calyx 3 mm. long, racemes subequal to leaves. 19. *I. Kirilowii*.
Calyx 4 mm. long, racemes much longer
than leaves 19. *I. Kirilowii*, var. *coreana*.
28. Leaflets not exceeding 2 cm. long and 1 cm.
broad 29.
Leaflets over 2 cm. long and 1 cm. broad 32.
29. Corolla 1.5 cm. long, bracts longer than
pedicel, long persistent 22. *I. Wilsonii*.
Corolla less than 1.2 cm. long, bracts small,
deciduous 30.
30. Stipules 1 mm. long 20. *I. rigioclada*.
Stipules at least 3 mm. long 31.
31. Pedicels 2 mm. long, racemes 3.5 cm. long 21. *I. Monbeigii*.
Pedicels 6 mm. long, racemes 8 cm. long 17. *I. Myosurus*.
32. Leaflets 5-9, young branches and leaf rachis
adpressed pubescent 24. *I. Carlesii*.
Leaflets 9-13, young branches and leaf rachis
glabrous 23. *I. ichangensis*.
33. Leaflets 7-9, 17-30 mm. long 25. *I. chalara*.
Leaflets 13-17, 7-19 mm. long 16. *I. Cooperii*.
34. Leaflets prominently reticulate on both sur-
faces, ovate to orbicular or terminal sub-
rhomboid 27. *I. venulosa*.
Leaflets not prominently reticulate 35.

35. Keel not acuminate 31. *I. Delavayi*.
Keel acuminate 36.
36. Acumen of keel nearly 2 mm. long 28. *I. Faberii*.
Acumen of keel short—not more than 0.5 mm.
long 37.
37. Leaflets rounded or retuse at apex, racemes
long, pendulous 29. *I. pendula*.
Leaflets narrowing upwards from about the
middle rarely rounded, racemes erect or
suberect 38.
38. Petiole and leaf rachis channelled above 30. *I. decora*.
Petiole and leaf rachis (except towards in-
sertion of upper leaflets) terete 39.
39. Wings decidedly less than keel, corolla to
12 mm. long 23. *I. ichangensis* f. *leptantha*.
Wings subequal to or longer than keel, corolla
at least 13 mm. long 40.
40. Wings subequal to keel, corolla nearly 16 mm.
long 23. *I. ichangensis*, f. *rigida*.
Wings slightly longer than keel, corolla to
13.5 mm. long 23. *I. ichangensis*, f. *calvescens*.
41. Leaflets all distinctly alternate, generally 11 32. *I. hendecaphylla*.
Leaflets opposite or occasionally the lower
alternate 42.
42. Leaflets glabrous or in young stage with a few
hairs on margin and costa 33. *I. subnuda*.
Mature leaflets not glabrous 43.
43. Leaflets glabrous on upper surface except
occasionally along the margin 44.
Leaflets glabrous on neither surface 49.
44. Virgate plant reaching only 15 cm. in height,
leaflets scarcely 5 mm. long 34. *I. chaetodonta*.
Plants at least 30 cm. high 45.
45. Leaves not exceeding 1.5 cm. in length 35. *I. Silvestrii*.
Leaves at least 3 cm. long 46.
46. Legumes curved 39. *I. Anil*.
Legumes straight 47.
47. Buds acute or acuminate 36. *I. sensitiva*.
Buds obtuse 48.
48. Racemes much less than the 13-17-foliolate
leaves, petiole over 15 mm. long 37. *I. mengtzeana*.
Racemes subequal to or longer than the 7-15-
foliolate leaves, petiole less than 15 mm.
long 38. *I. Pseudotinctoria*.

49. Corolla not exceeding 5 mm. in length 50.
Corolla at least 5 mm. long 51.
50. Legumes curved 39. *I. Anil.*
Legumes straight 40. *I. Bungeana.*
51. Leaflets 11 or fewer 52.
Leaflets more than 11 (occasional leaves with
11 leaflets may occur) 61.
52. Peduncle subequal to or longer than petiole 53.
Peduncle distinctly shorter than petiole 59.
53. Corolla less than 7 mm. long, leaflets up to
1 cm. long 54.
Corolla at least 7 mm. long, leaflets up to
2.5 cm. long 55.
54. Calyx lobes up to 2 mm. long 41. *I. Hosiei.*
Calyx lobes up to 1 mm. long 42. *I. lenticellata.*
55. Leaflets 3-5, racemes subequal to leaves 43. *I. sticta.*
Leaflets 7-11 56.
56. Pedicels (in flowering stage) at least 3 mm.
long 47. *I. Souliei.*
Pedicels (even in fruit) not exceeding 3 mm.
in length 57.
57. Stipules 7-8 mm. long, stipellae conspicuous,
leaflets reticulate 44. *I. reticulata.*
Stipules less than 4 mm. long, stipellae small,
leaflets not reticulate 58.
58. Corolla to 9.5 mm. long, stipules 2 mm. long 45. *I. szechuensis.*
Corolla to 7 mm. long, stipules nearly 4 mm.
long 46. *I. Potaninii.*
59. Buds acute or acuminate 49. *I. Mairei.*
Buds rounded at apex 60.
60. Petiole at least 30 mm. long, flowering pedicel
1.5 mm. long 48. *I. amblyantha.*
Petiole less than 15 mm. long, flowering pedicel
1 mm. long 38. *I. Pseudotinctoria.*
61. Pedicels at least 3 mm. long 62.
Pedicels less than 3 mm. long 63.
62. Racemes shorter than or subequal to the
leaves 50. *I. Henryi.*
Racemes longer than the leaves 47. *I. Souliei.*
63. Corolla glabrous or nearly so in bud 57. *I. atropurpurea*
Corolla adpressed pubescent in bud 64.

64. Leaflets more or less lanceolate, narrowing gradually upwards from about middle, 4-6 cm. long 56. *I. Teysmannii*.
 Leaflets more or less oblong, not exceeding 3.5 cm. in length 65.
65. Leaflets 12-35 mm. long, bracts conspicuous or subconspicuous 66.
 Leaflets not exceeding 12 mm. in length, bracts not conspicuous 67
66. Corolla about 6 mm. long, bracts conspicuous, leaflets up to 22 mm. long 54. *I. nigrescens*.
 Corolla about 8 mm. long, bracts subconspicuous, leaflets up to 35 mm. long 55. *I. galeoides*.
67. Keel long acuminate 51. *I. cinerascens*.
 Keel shortly or scarcely acuminate 68.
68. Leaflets 9-17, corolla 7.25 mm. long 52. *I. Hancockii*.
 Leaflets up to 13, corolla 6.5 mm. long 53. *I. Forrestii*.